



MS PETITION
PATENT
1912-0303PUS1

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IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: VEZINA et al. Conf.:
Appl. No.: 09/678,303 Art Unit: 1638
Filed: October 3, 2000 Examiner: G. Helmer
For: PROMOTER FOR REGULATING EXPRESSION OF
FOREIGN GENES

**PETITION TO WITHDRAW HOLDING OF ABANDONMENT UNDER 37 C.F.R. 1.181
SINCE REPLY WAS TIMELY FILED OR ALTERNATIVELY PETITION
FOR REVIVAL OF AN UNINTENTIONALLY ABANDONED APPLICATION**

MS PETITION
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

April 1, 2005

Sir:

In response to the Notice of Abandonment mailed July 14, 2004, which issued in connection with the above-identified application, this is a Petition to withdraw the "abandonment status" of the present application, since a Reply was timely filed on January 14, 2004 or alternatively for revival of an unintentionally abandoned application.

1. EVIDENCE

The Examiner assigned to the present application issued a Final Office Action on **June 3, 2003** setting a date for reply to expire three (3) months from the mailing date of the Office

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Action (i.e., September 3, 2003). A copy of the Final Office Action is attached hereto.

Applicants responded with a timely filed Amendment on **September 24, 2003**, which included a proper petition for a one (1) month extension of time from September 3, 2003 to October 3, 2003. A copy of the Amendment is attached hereto.

The Examiner issued a Notice of Non-Responsive Amendment on **December 18, 2003**, a copy of which is attached hereto. The Notice indicated that the Amendment filed on October 23, 2003 was *bone fide*, but did not comply with revised 37 C.F.R. § 1.121. Most importantly, the Notice set a date of **one (1) month or thirty (30) days from the mailing date of the notice** in which to correct the non-compliant section(s) of the Amendment (i.e., **January 18, 2004**). The Notice further stated that extensions of this time period were available under 37 C.F.R. § 1.136(a).

In response to the Notice, Applicants filed via facsimile a compliant Amendment on **January 15, 2004**, which date is less than 1 month or 30 days from the mailing date of the Notice. A copy of the Amendment filed on January 15, 2004 is attached hereto. An automatically generated return receipt confirmation was received from the USPTO indicating that all five (5) pages of the Amendment were received by the USPTO on January 15, 2004. A copy of the return receipt confirmation is attached hereto.

The Examiner then issued a Notice of Abandonment erroneously dated "**07/14/2002**" on the cover sheet, and received by Applicants on July 22, 2004. A copy of the Notice of Abandonment is attached hereto. It is evident that the date on the cover sheet

is erroneous since paragraph 1(a) of the Notice states that a reply was received on January 15, 2004, therefore making it impossible for the Examiner to have mailed the Notice on the day before. Paragraph 1 also indicates that the Final Office Action was mailed on June 2, 2003, which is clearly erroneous (see, Final Office Action dated June 3, 2003 attached hereto).

In any event, paragraph 1(a) of the Notice indicates, "A reply was received on 15 January 2004..., which is after the expiration of the period for reply (including a total extension of time of 3 month(s)) which expired on 03 January 2004." Paragraph 7 indicates, "Applicant filed a responsive After Final Amendment on 15 January 2004, which is after the six-month time period following the mailing of the Final Rejection, which was mailed on 2 June 2003. This amendment was not entered."

The expiration of the period for reply set forth in the Notice of Abandonment is clearly erroneous. As noted above, the Notice of Non-Responsive Amendment set a date of **one (1) month or thirty (30) days from the mailing date of the notice** in which to respond. Specifically, the Notice of Non-Responsive set a date of **January 18, 2004** in which to respond. The six month date of January 3, 2004 relied upon by the Examiner is irrelevant since the filing of the Amendment on September 23, 2003 tolled the six month period.

Thus, contrary to the Examiner's remarks in the Notice of Abandonment, the expiration of the period for Reply was **January 18, 2004 rather than January 3, 2004**. Again, Applicants duly filed a compliant Amendment on **January 15, 2004**, receipt of which

was acknowledged by the USPTO. For these reasons, the Notice of Abandonment is improper and should be withdrawn.

Furthermore, a Notice of Appeal is filed concurrently with this petition under separate cover. This Notice of Appeal constitutes a full response to the Final Office Action dated June 3, 2003.

In summary, as evidence of the fact that a Reply was timely filed, enclosed herewith are the following documents:

- A copy of the Final Office Action dated June 3, 2003;
- A copy of an Amendment filed on September 24, 2003;
- A copy of the Notice of Non-Compliant Reply dated December 18, 2003;
- A copy of an Amendment filed on January 15, 2004;
- A copy of the automatically generated return receipt confirmation dated January 15, 2004; and
- A copy of the Notice of Abandonment dated July 14, 2004.

It is requested that the abandonment status of the present application be immediately removed so that prosecution may resume with full consideration and entry into the record of the timely filed Reply.

It is submitted that no fees are required for filing this Petition, since the error occurred because of a mistake on the part of the U.S. Patent and Trademark Office.

2. TERMINAL DISCLAIMER

The present application was filed after May 29, 2000. Therefore, a terminal disclaimer should not be required as a

condition of granting an untimely petition to withdraw the holding of abandonment, since patent term adjustment is automatically reduced under the provisions of 37 C.F.R. § 1.704(c)(4).

3. ALTERNATIVE PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNINTENTIONALLY UNDER 37 C.F.R. § 1.137(b)

If this Petition under 37 C.F.R. § 1.181 to withdraw the holding of abandonment is dismissed as untimely under 37 C.F.R. § 1.181(f), then the Commissioner is respectfully requested to accept this Petition under 37 C.F.R. § 1.137(b) for revival of an application for patent abandoned unintentionally.

The Petition fee of fee \$750.00 (37 C.F.R. § 1.17(m)) is attached hereto. Applicant claims small entity status. See 37 C.F.R. § 1.27. As noted above, an Amendment was previously filed on January 15, 2004. Since this utility application was filed on or after May 29, 2000, no terminal disclaimer is required.

Statement: The entire delay in filing the instant petition under 37 C.F.R. § 1.181 to withdraw the holding of abandonment from two (2) months after the mail date of the notice of abandonment until the filing of a grantable petition under 37 C.F.R. § 1.181 was unintentional.

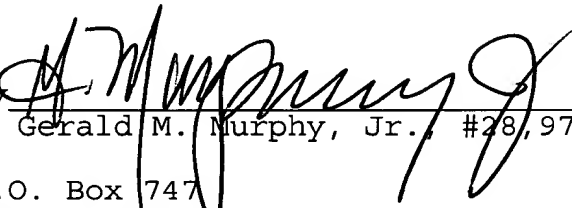
4. CONCLUSION

If the U.S. Patent Examiner has any questions regarding the above matters, please contact the undersigned at the phone number listed below.

However, if necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
Gerald M. Murphy, Jr., #28,977

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

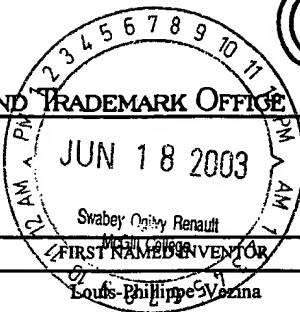

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1912-0303PUS1

Attachments:

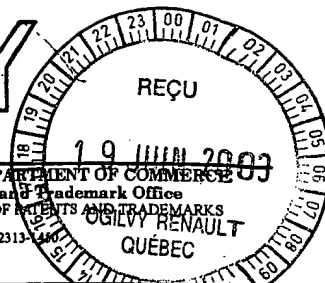
1. Final Office Action (June 3, 2003);
2. Amendment (September 24, 2003);
3. Notice of Non-compliant Reply (December 18, 2003);
4. Amendment (January 15, 2004);
5. Return receipt confirmation (January 15, 2004); and
6. Notice of Abandonment (July 14, 2004)



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COPY



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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,303	10/03/2000	Louis-Philippe Vézina	14149-4 "US" <i>hmb</i>	5731

20988 7590 06/03/2003
OGILVY RENAULT
1981 MCGILL COLLEGE AVENUE
SUITE 1600
MONTREAL, QC H3A2Y3
CANADA



EXAMINER

HELMER, GEORGIA L

ART UNIT PAPER NUMBER

1638

17

DATE MAILED: 06/03/2003

Final EXT. TERM!
DUE ON DEC 03 2003

SHORT TERM FINAL!
DUE ON SEP 03 2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

APR 01 2005

TRADEMARK OFFICE

Application No.

09/678,303

Applicant(s)

VEZINA ET AL.

Examiner

Georgia L. Helmer

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Status of the Claims

1. The Office acknowledges receipt of Applicants Response; dated 26 March 2003, paper number 16.
2. Applicant has cancelled claims 3 and 4, and amended claims 1, 2, and 5. New claims 9 and 10 have been added. Claims 1,2, and 5-10 are pending. Claims 1, 2, 5, 9 and 10 are examined in the instant action.
3. This application contains claims drawn to an invention nonelected with traverse in Paper No. 12, dated 21 October 2002. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
4. All rejections not addressed below have been withdrawn.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Specification

6. The first line of the specification is objected to because it recites the serial number of the present application, while stating that this application is a continuation of the same. Correction is required.

Applicant traverses, stating primarily that the version of the application in their hands does not contain an incorporation by reference mentioning a serial number. And that Examiner must have another versions of the application . Applicant requests

Art Unit: 1638

Examiner to send a copy of his version so as to enable corrections to the specification.

Applicant's traversal has been considered and is unpersuasive because the language at issue is present in the Preliminary Amendment, paper No. 4, filed 1 March 2002.

Applicant has requested amending the application by replacing the paragraph line I of page 5 with an amended paragraph. However the amended "paragraph" is not a paragraph, just a part of a paragraph. This amendment is objected to under 37 CFR 121(b), which states that such amendments need to be of complete paragraphs. This amendment has not been entered and Applicant should resubmit it in proper form.

Claim Rejections - 35 USC § 112, second paragraph

7. Claims 1,2, 5, 9, and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, "the" needs to be inserted between "consisting of" and "sequences set forth". Otherwise the claim is indefinite and reads on pieces of the complete SEQ ID Nos.

In claim 2, "the" needs to be inserted between DNA of interest by" and "presence" for clarity. Also, "presence of light" implies all light conditions of all magnitudes and wavelengths.

Claim Rejections - 35 USC § 112, first paragraph

Enablement

8. Claims 1,2, 5, 9, and 10 remain rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This rejection is maintained for reasons of record.

Applicant traverses, stating primarily that from the disclosure, it is shown how to prepare the expression vectors, that someone skilled in the art would easily perform the protocol described by the manufacturers specification. And that someone skilled in the art having the plasmid pGPLAS3.2 in his hands would recognize that it results from the integration of SEQ ID NO: 1 into the cloning vector pGEM/T which is a vector provided by Promega.

Applicant's traversal has been considered and is unpersuasive because no description of pGPLAS3.2 has been provided, nor is information about what DNA sequences, in what configuration, of what length, and in what orientation are present in the plasmid. Neither the specification nor the Declaration of Dr. Marc-Andre Daoust, dated 21 February 2001, provides this information.

Applicant traverses, stating primarily the Declaration of Dr. Marc-Andre Daoust, dated 21 February 2001, as well as the results described in the present application show that the promoter described in SEQ ID NO: 1, and fragments thereof, namely P960 and P729, which are respectively SEQ ID NO: 2 and 3, are active in inducing the transcription of the β -Glucuronidase marker genetically transformed plant cells.

Applicant's traversal has been considered and is unpersuasive because the starting materials for the experiments described in the Declaration-- the specific DNA delivered, the specifics of the DNA constructs, what sequences and genes are involved, whether an expression cassette or vector is involved, are not described other than citing "the P960 deletion". No information is given on the relationship of the specifics of the Declaration to the claimed invention. What is P970? What is pGPLAS3.2? How do these relate to the claimed invention?

Applicant traverses, stating primarily that one skilled in the art will understand that Applicants do not claim plants or plants cells in which the promoters of the present invention do not work. And that also, it is well known in the art that the use of a promoter originating from one group of organism, such as dicots, can be successfully used in other groups, such as monocots or vice versa.

Applicant's traversal has been considered and is unpersuasive for reasons of record, re-cited below:

Art Unit: 1638

Applicant is not enabled for all plant cells, or for the broad scope of the claims. This is because using a promoter isolated from one species of plant would produce unpredictable results when said promoter is used to specify expression of a gene in another species of plant. Oommenn et al (1994, The Plant Cell 6:1789-1803) teach that the alfalfa isoflavone reductase promoter exhibits a different expression pattern in tobacco as compared to the expression in alfalfa. In tobacco, the alfalfa isoflavone reductase promoter expressed in vegetative tissues and in reproductive organs whereas the same construct only expressed in the root meristem, cortex and nodules of alfalfa plants (abstract).

Remarks

9. No claim is allowed.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

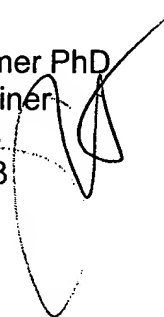
Art Unit: 1638

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia L. Helmer whose telephone number is 703-308-7023. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 703-306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Georgia Helmer PhD
Patent Examiner
Art Unit 1638
May 30, 2003



ELIZABETH F. McELWAIN
PRIMARY EXAMINER
GROUP 1600

Filed by Facsimile

(703) 308-4242

September 24, 2003



COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Louis-Philippe Vézina et al.
Serial No.: 09/678,303
Filing date: October 3, 2000
Title: PROMOTER FOR REGULATING EXPRESSION OF FOREIGN
GENES
Examiner: Helmer, Georgia L. Tel.: (703) 308-7023
Group Art Unit: 1638
Attorney Docket: 14149-4US PM/MG/al
Agent of Applicants: Paul MARCOUX Tel.: (418) 640-5988

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450
U.S.A.

AMENDMENT

Sir:

In response to the Final Official Communication of June 3, 2003, please amend the above-identified application as follows. Applicants submit concurrently herewith a petition for extension of time from September 3, 2003 to October 3, 2003 accompanied by the required fee.

IN THE CLAIMS

Kindly amend the claims 1, 5 and 10. Claim 2 is deleted.

1. (currently amended) An isolated promoter for regulating expression of foreign DNA of interest in leaves of a transgenic plant, which comprises a promoter having a sequence selected from the group consisting of the sequences set forth in SEQ ID NOS:1 to 3, wherein said promoter is operably linked to said foreign DNA of interest for expression of said foreign DNA of interest.

~~2. (currently deleted) The promoter of claim 1, wherein said promoter is activated for transcriptional expression of said foreign DNA of interest by presence of light.~~

5. (currently amended) The promoter of claim 1, wherein said plant is an dicot, a monocot or a gymnosperm alfalfa.

10. (currently amended) A plant cell or a plant genetically transformed with the expression vector of claim 9 for transgenic expression in leaves of foreign DNA of interest.

IN THE SPECIFICATION

Kindly replace pages 1, 4 and 5 of the specification currently on file by the substitute pages 4 and 5 of specification enclosed herewith, on which changes relative to the immediate prior version have been marked-up.

REMARKS

IN THE CLAIMS

Claims 1, 2, 5, 9 and 10 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Claim 1 has been amended by introducing the word "the" between "consisting of" and "sequences set forth".

Claim 2 has been deleted from the application.

Claim 5 has been amended by limiting the group of plant to alfalfa.

Claim 10 has been amended by limiting the transgenic expression of a foreign DNA of interest to leaves of the plant cells or plants.

According to the amendments introduced into claims 1, 5 and 10, Applicants believe that the expression of a foreign DNA of interest into plants or plant cells, now being limited to leaves, is in accordance with the state of the art, particularly with Oommenn et al. (1994, The Plant Cell, vol. 6: 1789-1803) cited in the Office Action dated June 3, 2003.

No new matter has been added with the amendment.

IN THE SPECIFICATION

In the first and second lines of the specification, the sentence "this application is a continuation application of US serial number 09/678,303 filed on October 3, 2000" has been deleted. As a petition to revive the present application number 09/678,303 has been granted on June 6, 2002, paper number 8, it is respectfully submitted that the present application be prosecuted as such, and not as a continuation of a parent application.

The Examiner has rejected the specification under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected to make and/or use the invention.

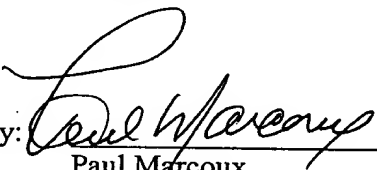
A plurality of amendments were carried out in the specification by the Applicants to clarify and formalize the application.

In the paragraph bridging on line 30 of page 4 to line 9 of page 5, the disclosure was amended to replace the claim language, namely to replace the term "various" by "SEQ ID NO:2 and SEQ ID NO:3" which are described in the application and are two deletion fragments of "SEQ ID NO:1"; the term SEQ ID NO:1 replaces the occurrence of "pGPlas3.2".

By limiting the deletion fragments to SEQ ID NO:2 and 3, which are fragments of SEQ ID NO:1, which themselves replaces the term pGPlas3.2, Applicants believe that the specification is now in condition enabling someone skilled in the art to carry out the invention as claimed in claim 1, 5, 9 and 10. Claim 2 was deleted from the application. No new matter has been added.

Applicants respectfully submit that the specification and claims as amended render the application in condition for allowance. Reconsideration of the objections is respectfully requested. In the event that there are any questions concerning this amendment or the application in general, the Examiner is respectfully urged to telephone the undersigned so that prosecution of this application may be expedited.

Respectfully submitted,

By: 
Paul Marcoux
Registration No. 24,990

OGILVY RENAULT
1981, McGill College
Suite 1600
Montreal (Quebec)
Canada, H3A 2Y3

(418) 640-5988

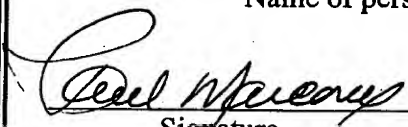
Date: September 24, 2003

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the
Patent and Trademark Office on the date shown below.

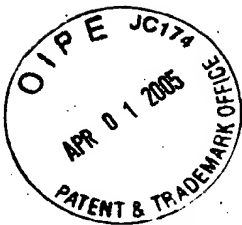
Paul Marcoux , 24,990

Name of person signing certification


Signature

September 24, 2003

Date



PROMOTER FOR REGULATING EXPRESSION OF FOREIGN GENES

~~_____ This application is a continuation application of US Serial No. 09/678,303 filed on October 3, 2000.~~

BACKGROUND OF THE INVENTION

(a) Field of the Invention

The invention relates to a promoter for regulating expression of foreign genes in a transgenic organism, more specifically in a leaf-specific manner in transgenic plants.

(b) Description of Prior Art

Genetic transformation of microbes have been used for more than 15 years to produce useful recombinant molecules, and applications in the pharmaceutical, cosmaceutical and dermaceutical industries are being currently exploited. This technology has expanded from microbes to plants and animals in the last ten years with the development of techniques required to adapt this general concept to complex eukaryotic organisms. Basically a gene encoding for a protein of interest or a gene encoding for an enzyme responsible for a modification of a metabolic pathway that leads to a molecule of interest, is linked in an appropriate fashion to cis- and trans-acting regulatory sequences, and transferred to a target cell where it is incorporated in the molecular machinery (in a transitory or stable fashion). The transgenic cell, or a tissue or organism regenerated from the transgenic cell will then perform transcription and translation of the transgene and therefore be enabled to accumulate the protein of interest or to perform the new metabolic reaction through the activity of the enzyme of interest.

The emerging industry of molecular farming is one of the most promising industry of the coming century. Its promise is to provide safe and renewable molecule factories for the industry. Among the applications that are currently developed are the production of low-cost monoclonal antibodies for therapeutic and diagnostic uses, the production of unlimited amounts of hormones, cytokines and other bio-active molecules for the treatment of chronic or lethal diseases, the production of bio-safe substitutes for various blood components, the production of unlimited amounts of processing enzymes for the food and pulp industry, the production of low-cost enzymes for waste treatments, and the production of safe bio-active molecules for the cosmetic industry.

ORF of a gene, wherein said promoter is operationally located with respect to said gene for expression of said gene.

For the purpose of the present invention the following terms are defined below.

5 The expression "functional fragments or derivatives thereof" is intended to mean any derivative or fragment of sequences SEQ ID NOS:1-3 which allow for an equivalent level of expression of a foreign gene as the promoter of the present invention set forth in SEQ ID NOS:1-3.

DETAILED DESCRIPTION OF THE INVENTION

10 Following is a detailed description of the method used to generate transgenic alfalfa lines that can be regulated in their expression of a reporter gene.

In this embodiment, a promoter having the sequence set forth in SEQ ID NOS:1-3 was then ligated to a reporter gene and a terminator, and
15 this construct was inserted in suitable plant expression vectors for DNA bombardment onto alfalfa leaves and for *Agrobacterium* mediated DNA transfer as described by Desgagnés et al. (1995, *Plant Cell Tissue Organ Cult.* 42:129-140). These two DNA transfer methods were used to demonstrate that expression of the reporter gene can be modulated by light.

20

Materials and Methods

DNA sequencing

25 DNA sequencing was performed as described by Sanger et al (1977, *P.N.A.S. USA*, 74:5643-5647).

The resulting promoters of the present invention have the sequence as set forth in SEQ ID NOS: 1 to 3.

Construction of expression cassettes and vectors

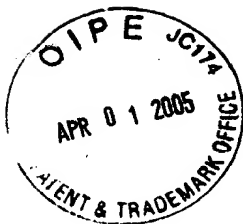
30 The cassettes for expression analysis using the GUS reporter gene were assembled as follows. A promoterless GUS cassette was digested from pBI101 with HindIII and EcoRI, and was inserted into the HindIII and EcoRI sites of the pUC19 polycloning site. The resulting plasmid was named pBI201

and was used for further constructs. Various SEQ ID NO:2 and SEQ ID NO:3, two and deletion fragments of pGPlas3-2 SEQ ID NO:1, were operably transcriptionally and transitionally fused at the 5'terminus of the GUS reporter gene in pBI201 by PCR ligation, and these resulting constructs were used for
5 transitory expression studies using DNA bombardment. ~~Upon identification of the adequate deletion fragment, it was~~ or subcloned into a binary plant expression vector such as pBI101 (Clonetech). These recombinant plasmids were used for stable integration through *A. tumefaciens* infection as described below.

***Agrobacterium*-mediated DNA transfer and regeneration of transgenic lines**

The recombinant plasmids were introduced into *Agrobacterium tumefaciens* strain LBA4404 by electroporation as described in Khoudi et al
15 (1999, *Biotechnol. Bioeng.*, 64:135-143). Selected *Agrobacterium* strains were then co-cultivated with leaf disks from genotype C5-1 for 4 days in the absence of selection pressure (kanamycin). Following this incubation period, leaf disks were washed and pampered, and then allowed to form calli onto medium B5H. Calli were then transferred for 21 days on SH medium for
20 embryo induction and for 28 days on BOi2Y for embryo development. Torpedo-shaped embryos were removed from Boi2Y and placed on MS medium for regeneration. Kanamycin was present in all cultivation medium except for co-cultivation and regeneration on MS. This method is described in length in Desgagnés et al (1995, *Plant Cell Tissue Organ Cult.* 42:129-140).
25 Rooted plantlets were grown to maturity in the greenhouse.

While the invention has been described in connection with specific embodiments thereof, it will be understood that it is capable of further modifications and this application is intended to cover any variations, uses, or adaptations of the invention following, in general, the principles of the
30 invention and including such departures from the present disclosure as come within known or customary practice within the art to which the invention pertains and as may be applied to the essential features hereinbefore set forth, and as follows in the scope of the appended claims.



Patent
Attorney's Docket No. 14149-4US PM/MG/a1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Louis-Philippe Vézina et al.

Serial No.: 09/678,303

Group Art Unit: 1638

Filed: October 3, 2000.

Examiner: Helmer, Georgia L.

For: PROMOTER FOR REGULATING EXPRESSION OF FOREIGN GENES

PETITION UNDER 37 C.F.R. 1.136(a)

Commissioner for Patents,
Alexandria VA 22313-1450
U.S.A.

Sir:

A one-month extension of time for response to Restriction Requirement from September 3 to October 3, 2003 is respectfully requested.

The Commissioner is hereby authorized to charge the amount of \$55.00, which covers the fee for the one-month extension of time (small entity) and is also authorized to charge any additional fees or credit any overpayment to Deposit Account No. 19-5113.

Respectfully submitted,

Date September 24, 2003


Paul Marcoux Reg. No. 24,990

OGILVY RENAULT

1981 McGill College

Suite 1600

Montreal, Quebec

Canada H3A 2Y3

Tel.: (418) 640-5988



PROMOTER FOR REGULATING EXPRESSION OF FOREIGN GENES

BACKGROUND OF THE INVENTION

(a) Field of the Invention

The invention relates to a promoter for regulating expression of foreign genes in a transgenic organism, more specifically in a leaf-specific manner in transgenic plants.

(b) Description of Prior Art

Genetic transformation of microbes have been used for more than 15 years to produce useful recombinant molecules, and applications in the pharmaceutical, cosmaceutical and dermaceutical industries are being currently exploited. This technology has expanded from microbes to plants and animals in the last ten years with the development of techniques required to adapt this general concept to complex eukaryotic organisms. Basically a gene encoding for a protein of interest or a gene encoding for an enzyme responsible for a modification of a metabolic pathway that leads to a molecule of interest, is linked in an appropriate fashion to cis-and trans-acting regulatory sequences, and transferred to a target cell where it is incorporated in the molecular machinery (in a transitory or stable fashion). The transgenic cell, or a tissue or organism regenerated from the transgenic cell will then perform transcription and translation of the transgene and therefore be enabled to accumulate the protein of interest or to perform the new metabolic reaction through the activity of the enzyme of interest.

The emerging industry of molecular farming is one of the most promising industry of the coming century. Its promise is to provide safe and renewable molecule factories for the industry. Among the applications that are currently developed are the production of low-cost monoclonal antibodies for therapeutic and diagnostic uses, the production of unlimited amounts of hormones, cytokines and other bio-active molecules for the treatment of chronicle or lethal diseases, the production of bio-safe substitutes for various blood components, the production of unlimited amounts of processing enzymes for the food and pulp industry, the production of low-cost enzymes for waste treatments, and the production of safe bio-active molecules for the cosmetic industry.

ORF of a gene, wherein said promoter is operationally located with respect to said gene for expression of said gene.

For the purpose of the present invention the following terms are defined below.

5 The expression "functional fragments or derivatives thereof" is intended to mean any derivative or fragment of sequences SEQ ID NOS:1-3 which allow for an equivalent level of expression of a foreign gene as the promoter of the present invention set forth in SEQ ID NOS:1-3.

DETAILED DESCRIPTION OF THE INVENTION

10 Following is a detailed description of the method used to generate transgenic alfalfa lines that can be regulated in their expression of a reporter gene.

In this embodiment, a promoter having the sequence set forth in SEQ ID NOS:1-3 was then ligated to a reporter gene and a terminator, and
15 this construct was inserted in suitable plant expression vectors for DNA bombardment onto alfalfa leaves and for *Agrobacterium* mediated DNA transfer as described by Desgagnés et al. (1995, *Plant Cell Tissue Organ Cult.* 42:129-140). These two DNA transfer methods were used to demonstrate that expression of the reporter gene can be modulated by light.

20

Materials and Methods

DNA sequencing

DNA sequencing was performed as described by Sanger et al
25 (1977, *P.N.A.S. USA*, 74:5643-5647).

The resulting promoters of the present invention have the sequence as set forth in SEQ ID NOS: 1 to 3.

Construction of expression cassettes and vectors

30 The cassettes for expression analysis using the GUS reporter gene were assembled as follows. A promoterless GUS cassette was digested from pBI101 with HindIII and EcoRI, and was inserted into the HindIII and EcoRI sites of the pUC19 polycloning site. The resulting plasmid was named pBI201

and was used for further constructs. SEQ ID NO:2 and SEQ ID NO:3, two and deletion fragments of SEQ ID NO:1, were operably fused at the 5'terminus of the GUS reporter gene in pBI201 by PCR ligation, and resulting constructs were used for transitory expression studies using DNA bombardment or subcloned into a binary plant expression vector such as pBI101 (Clontech). These recombinant plasmids were used for stable integration through *A. tumefaciens* infection as described below.

***Agrobacterium*-mediated DNA transfer and regeneration of transgenic lines**

The recombinant plasmids were introduced into *Agrobacterium tumefaciens* strain LBA4404 by electroporation as described in Khoudi et al (1999, *Biotechnol. Bioeng.*, 64:135-143). Selected *Agrobacterium* strains were then co-cultivated with leaf disks from genotype C5-1 for 4 days in the absence of selection pressure (kanamycin). Following this incubation period, leaf disks were washed and pampered, and then allowed to form calli onto medium B5H. Calli were then transferred for 21 days on SH medium for embryo induction and for 28 days on BOi2Y for embryo development. Torpedo-shaped embryos were removed from Boi2Y and placed on MS medium for regeneration. Kanamycin was present in all cultivation medium except for co-cultivation and regeneration on MS. This method is described in length in Desgagnés et al (1995, *Plant Cell Tissue Organ Cult.* 42:129-140). Rooted plantlets were grown to maturity in the greenhouse.

While the invention has been described in connection with specific embodiments thereof, it will be understood that it is capable of further modifications and this application is intended to cover any variations, uses, or adaptations of the invention following, in general, the principles of the invention and including such departures from the present disclosure as come within known or customary practice within the art to which the invention pertains and as may be applied to the essential features hereinbefore set forth, and as follows in the scope of the appended claims.



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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,303	10/03/2000	Louis-Phillippe Vezina	14149-4 "US" PC MG	5731
20988	7590	12/18/2003	EXAMINER	
OGILVY RENAULT 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA			HELMER, GEORGIA L.	
			ART UNIT	PAPER NUMBER
			1638	

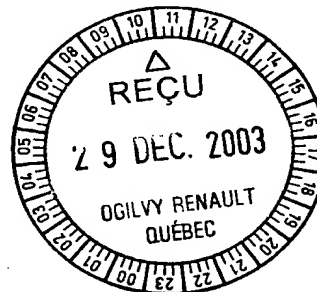


DATE MAILED: 12/18/2003

FINAL EXT. TERM!
DUE ON JUN 18 2004

SHORT TERM!
DUE ON JAN 18 2004

Please find below and/or attached an Office communication concerning this application or proceeding.





UNITED STATES DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER
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33

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

09/678,303

See attached Notice of Non-Responsive Amendment.

Notice of Non-Responsive Amendment

1. The reply filed on 23 October 2003 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s): All amendments filed on or after the effective date of 30 July 2003 must comply with revised 37 CFR 1.121. See MPEP 714.03 (Rev. 1, Feb 2003). See Final Rule: Changes To Implement Electronic Maintenance of Official Patent Application Records (68 Fed. Reg. 38611 June 30, 2003, posted on the Office's website at: <http://www.uspto.gov/web/patents/ifw/> with related information. The noncompliant section(s) will have to be corrected and the entire corrected section(s) resubmitted within a set period.

Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia L. Helmer whose telephone number is ~~703-308-~~⁵⁷¹⁻²⁷²⁻⁰⁷⁹⁶ ~~7023~~. Note that Examiner's phone number will change to 571-272-0796 as of 6 January 2004. The examiner can normally be reached on 8:30 - 5:00.

Application/Control Number: 09/678,303

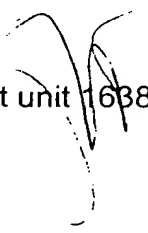
Page 3


Art Unit: 1638

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 703-306-3218. The fax phone number for the organization where this application or proceeding is assigned is 703-308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Georgia Helmer PhD
Patent Examiner
Transgenic Plants, Art unit 1638
November 26, 2003




ELIZABETH F. McELWAIN
PRIMARY EXAMINER
GROUP 1600



COPY

Filed by Facsimile

(703) 872-9306

January 15, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Louis-Philippe Vézina et al.
Serial No.: 09/678,303
Filing date: October 3, 2000
Title: PROMOTER FOR REGULATING EXPRESSION OF FOREIGN
GENES
Examiner: Helmer, Georgia L. Tel.: (571) 272-0796
SPE : Nelson, Amy Tel.: (703) 306-3218
Group Art Unit: 1638
Attorney Docket: 14149-4US PM/MG/al
Agent of Applicants: Isabelle CHABOT Tel.: (418) 640-5174

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450
U.S.A.

AMENDMENT

Sir:

In response to the Official Communication of December 18, 2003, containing a Notice of Non-Responsive Amendment, please amend the above-identified application as follows.

Applicants apologize for the error in formatting the last reply of October 23, 2003 to the final office action of June 3, 2003. The present amendment presents the same content as our reply of October 23, 2003 but the amendment format is hereby corrected.

IN THE CLAIMS

Kindly amend claims 1, 5 and 10. Claim 2 is deleted.

1. (currently amended) An isolated promoter for regulating expression of foreign DNA of interest in leaves of a transgenic plant, which comprises a promoter having a sequence selected from the group consisting of the sequences set forth in SEQ ID NOS:1 to 3, wherein said promoter is operably linked to said foreign DNA of interest for expression of said foreign DNA of interest.

2. (currently deleted)

3. (previously deleted)

4. (previously deleted)

5. (currently amended) The promoter of claim 1, wherein said plant is ~~an dicot, a monocot or a gymnosperm~~ alfalfa.

6. (nonelected) A method of regulating expression of foreign genes in transgenic organisms, comprising the steps of: preparing a transgenic organism using an expression construct consisting of at least a promoter of claim 1, and an ORF of a gene, wherein said promoter is operationally located with respect to said gene for expression of said gene.

7. (nonelected) The method of claim 6, wherein said organism is a plant.

8. (nonelected) The method of claim 7, wherein said plant is a dicot, a monocot or a gymnosperm.

9. (original) An expression vector comprising a promoter as defined in claim 1.

10. (currently amended) A plant cell or a plant genetically transformed with the expression vector of claim 9 for transgenic expression in leaves of foreign DNA of interest.

IN THE SPECIFICATION

Kindly amend the specification as follows :

At page 1, delete the paragraph starting at line 2, namely

This application is a continuation application of US Serial No. 09/678,303 filed on October 3, 2000.

At page 5, replace the paragraph starting at line 1 by :

and was used for further constructs. SEQ ID NO:2 and SEQ ID NO:3, two and deletion fragments of SEQ ID NO:1, were operably fused at the 5'terminus of the GUS reporter gene in pBI201 by PCR ligation, and resulting constructs were used for transitory expression studies using DNA bombardment or subcloned into a binary plant expression vector such as pBI101 (Clontech). These recombinant plasmids were used for stable integration through *A. tumefaciens* infection as described below.

REMARKS

IN THE CLAIMS

Claims 1, 2, 5, 9 and 10 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

Claim 1 has been amended by introducing the word "the" between "consisting of" and "sequences set forth".

Claim 2 has been deleted from the application.

Claim 5 has been amended by limiting the group of plant to alfalfa.

Claim 10 has been amended by limiting the transgenic expression of a foreign DNA of interest to leaves of the plant cells or plants.

According to the amendments introduced into claims 1, 5 and 10, Applicants believe that the expression of a foreign DNA of interest into plants or plant cells, now being limited to leaves, is in accordance with the state of the art, particularly with Oommenn et al. (1994, The Plant Cell, vol. 6: 1789-1803) cited in the Office Action dated June 3, 2003.

No new matter has been added with the amendment.

IN THE SPECIFICATION

In the first and second lines of the specification, the sentence "this application is a continuation application of US serial number 09/678,303 filed on October 3, 2000" has been deleted. As a petition to revive the present application number 09/678,303 has been granted on June 6, 2002, paper number 8, it is respectfully submitted that the present application be prosecuted as such, and not as a continuation of a parent application.

The Examiner has rejected the specification under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected to make and/or use the invention.

A plurality of amendments were carried out in the specification by the Applicants to clarify and formalize the application.

In the paragraph bridging on line 30 of page 4 to line 9 of page 5, the disclosure was amended to replace the claim language, namely to replace the term "various" by "SEQ ID NO:2 and SEQ ID NO:3" which are described in the application and are two deletion fragments of "SEQ ID NO:1", the term SEQ ID NO:1 replaces the occurrence of "pGPlas3.2".

By limiting the deletion fragments to SEQ ID NO:2 and 3, which are fragments of SEQ ID NO:1, which themselves replaces the term pGPlas3.2, Applicants believe that the specification is now in condition enabling someone skilled in the art to carry out the invention as claimed in claim 1, 5, 9 and 10. Claim 2 was deleted from the application. No new matter has been added.

Applicants respectfully submit that the specification and claims as amended render the application in condition for allowance. Reconsideration of the objections is respectfully requested. In the event that there are any questions concerning this amendment or the application in general, the Examiner is respectfully urged to telephone the undersigned so that persecution of this application may be expedited.

Respectfully submitted,

By:

Isabelle Chabot

Isabelle CHABOT, Reg. No. P-55,764
Provisionally registered patent agent
Customer Number 020988

OGILVY RENAULT
1981, McGill College, Suite 1600
Montreal (Quebec) Canada, H3A 2Y3
(418) 640-5174
Date: January 15, 2004

CERTIFICATE OF FACSIMILE TRANSMISSION

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Patent and Trademark Office on the date shown below.

Isabelle CHABOT (Reg. No. P-55,764)

Name of person signing certification

Isabelle Chabot

Signature

January 15, 2004

Date

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ÉMISSION OK



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(703) 872-9306

January 15, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Louis-Philippe Vézina et al.
Serial No.: 09/678,303
Filing date: October 3, 2000
Title: PROMOTER FOR REGULATING EXPRESSION OF FOREIGN
GENES
Examiner: Helmer, Georgia L. Tel.: (571) 272-0796
SPE : Nelson, Amy Tel.: (703) 306-3218
Group Art Unit: 1638
Attorney Docket: 14149-4US PM/MG/al
Agent of Applicants: Isabelle CHABOT Tel.: (418) 640-5174

Commissioner for Patents
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AMENDMENT

Sir:

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OGILVY RENAUULT

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January 15, 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Louis-Philippe Vézina et al.
Serial No.: 09/678,303
Filing date: October 3, 2000
Title: PROMOTER FOR REGULATING EXPRESSION OF FOREIGN GENES
Examiner: Helmer, Georgia L. Tel.: (571) 272-0796
SPE: Nelson, Amy Tel.: (703) 306-3218
Group Art Unit: 1638
Attorney Docket: 14149-4US FM/MG/al
Agent of Applicants: Isabelle CHABOT Tel.: (418) 640-5174

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450
U.S.A.

AMENDMENT

Sir:

In response to the Official Communication of December 18, 2003, containing a Notice of Non-Responsive Amendment, please amend the above-identified application as follows.

Applicants apologize for the error in formatting the last reply of October 23, 2003 to the final office action of June 3, 2003. The present amendment presents the same content as our reply of October 23, 2003 but the amendment format is hereby corrected.



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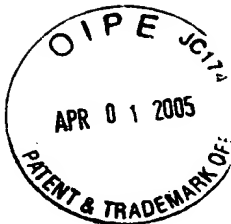
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,303	10/03/2000	OGILVY RENAULT 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA	14149-4 "US" P.C. mb	5731
20988	7590	07/14/2004	EXAMINER	
			HELMEY, GEORGIA L	
			ART UNIT	PAPER NUMBER
			1638	

REÇU
23 JUL. 2004
OGILVY RENAULT
QUÉBEC

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



Notice of Abandonment

Application No.

09/678,303

Examiner

Georgia L. Helmer

Applicant(s)

VEZINA ET AL.

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 2 June 2003.

(a) ☒ A reply was received on 15 January 2004 (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of 3 month(s)) which expired on 03 January 2004.

(b) ☒ A proposed reply was received on 26 September 2003, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.

(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).

(c) ☒ A reply was received on 15 January 2004 but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).

(d) ☐ No reply has been received.

2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).

(a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).

(b) ☐ The submitted fee of \$_____ is insufficient. A balance of \$_____ is due.

The issue fee required by 37 CFR 1.18 is \$_____. The publication fee, if required by 37 CFR 1.18(d), is \$_____.

(c) ☐ The issue fee and publication fee, if applicable, has not been received.

3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).

(a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.

(b) ☐ No corrected drawings have been received.

4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.

5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.

6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.

7. ☒ The reason(s) below:

Applicant filed a responsive After Final Amendment on 15 January 2004, which is is after the six-month time period following the mailing of the Final Rejection, which was mailed on 2 June 2003. This amendment was not entered.

12 July 04
Helmer

ELIZABETH F. McELWAIN
ELIZABETH F. McELWAIN
PRIMARY EXAMINER
GROUP 1800

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

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